## Claims

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- 1. The use of microbial lipids for the manufacture of a composition for oral administration for use in the treatment of animal subjects to reduce plasma cholesterol levels therein or to reduce the ratio of LDL to HDL cholesterol in the plasma thereof.
- The use of microbial lipids for the manufacture of a composition for oral administration for use in the treatment of animal subjects to increase plasma DHA.
  - 3. The use of microbial lipids for the manufacture of a composition for oral administration for use in the treatment of animal subjects as an immuno-protectant.
    - 4. The use as claimed in any one of claims 1 to 3 wherein said animal is a human.
- 20 5. The use as claimed in any one of claims 1 to 3 wherein said animal is a fish.
  - 6. The use as claimed in any one of claims 1 to 3 wherein said animal is a juvenile fish.
- 7. The use as claimed in any of the preceding claims wherein said lipids are produced by methanotrophic bacteria.
- 30 8. The use as claimed in any of the preceding claims wherein said composition is administered in encapsulated form.
- 9. A method of treatment of an animal subject to
  reduce plasma cholesterol levels therein, to maintain a reduced plasma cholesterol level therein, or to reduce the ratio of LDL to HDL cholesterol in the plasma

thereof, said method comprising orally administering to said subject an effective amount of a microbial lipid

Microbial lipid for use as a medicament.

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- 11. Methylococcus lipid for use as a medicament.
- 12. A microbial lipid, preferably at least 80% wt. pure, and preferably in a quantity of at least 10g.

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- 13. A microbe-derived phospholipid, especially a phosphatidylethanolamine, and particularly a phosphatidylethanolamine with  $C_{16:0}$  and/or  $C_{16:1}$  fatty acid side chains, preferably at least 80% wt. pure, and preferably in a quantity of at least 10g, e.g. for use in medicine.
- 14. A foodstuff containing a microbial lipid extract and a further nutrient component, preferably of nonmicrobial origin.
  - 15. A pharmaceutical or nutraceutical composition comprising a microbial lipid extract together with a pharmaceutically acceptable carrier or excipient.

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- A food product harvested from an animal fed with a microbial lipid.
- 17. A product as claimed in claim 16 in the form of an avian egg. 30